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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,748	07/31/2001	Robert E. Gillis	016494-001100US	5719

20350 7590 09/11/2002

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

YIP, WINNIE S

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,748

Applicant(s)

GILLIS, ROBERT E.

Examiner

Winnie Yip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is a first office action for application Serial No. 09/919,748 filed July 31, 2001.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the term "dome-like" renders the claim indefinite because the claim includes elements not actually disclosed, thereby rendering the scope of the claims unascertainable. See MPEP § 2173.05(d). Should it read "dome-shaped"?

Regarding claim 5, the term "a tension harness" (line 10) is confusing whether this "tension harness" is a different tension harness than one defined in previous claim 1. If not, a proper antecedent basis is required. If so, applicant needs to differentiate them with proper antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-4, 6, 7-12, 16-20, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kramer et al. (US Patent No.5,901,727).

Kramer et al. show and disclose a frame for a shelter structure (see attached Figs 17, 19, and 20), comprising: a plurality of flexible poles (12) each having two terminal ends, the poles being assumed a substantially arcuate shape under tension with the two terminal ends being terminated into a common plane such as to the ground to define a dome-shaped interior volume, the poles being intersected to form a plurality of crossings such that a plurality of four-sided openings (areas 10c of Figs. 17 and 19; and areas 10D of Fig. 20) are formed by the intersected poles, each of the four-sided opening having vertices (A, B, C, D) formed by crossings of poles and sides formed by sections (a, b, c, d) of poles, a flexible membrane being connected to the poles at a plurality of points. Wherein, in Fig. 16, Kramer et al. further teach the frame includes at least one tension harness (84) connected between the diagonal vertices of the opening, the tension harness also having free ends being fastened to the ends of the poles on the common plane.

5. Claims 1-4, 8-11 and 16-20, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Gills (US Patent No.6,145,527) (Document 19).

Gillis shows and discloses a frame for a shelter structure, comprising a plurality of flexible poles (12) each having two terminal ends, the poles being assumed a substantially arcuate shape under tension with the two terminal ends being terminated into a common plane such as to the ground to define a dome-shaped interior volume, the poles being intersected to form a plurality of crossings (16) such that a plurality of four-sided openings are formed by the

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intersected poles (see Fig. 1), each of the four-sided opening having vertices formed by crossings of poles and sides formed by sections of poles, a plurality of tension harnesses (44a, 44b or 24) connected between the diagonal vertices of the opening, the tension harness having free ends being fastened to points (62) on the common plane of the poles (see Fig. 8), and a flexible membrane being connected to the poles at a plurality of points via the tension harnesses.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-20, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant (US Patent No. 5,117,852) in view of Pelsue et al. (US Patent No. 4,941,499).

Bryant shows and discloses a frame for a shelter structure comprising: a plurality of flexible poles (18, 20, 22, 24, 26) each having two terminal ends, the poles being assumed a substantially arcuate shape under tension with the two terminal ends being terminated into a common plane (48) to define a dome-shaped interior volume, the poles being intersected to form a plurality of crossings (70) such that a plurality of four-sided openings are formed by the intersected poles (at the areas 322 and 316) (see Fig. 4), wherein each of the four-sided opening (i.e., 316 or 322) having four vertices formed by crossings of poles and four sides formed by sections of poles, and a flexible membrane being connected to the poles at a plurality of points. Wherein, in Fig. 16, Kramer et al. further teach the frame includes at least one tension harness

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(84) connected between the diagonal vertices of the opening, the tension harness also having free ends being fastened to the ends of the poles on the common plane. However, Bryant does not define the frame having at least one tension harness connected between diagonal vertices of the opening and extending to a position in a common plane that the ends of the poles to be rested. Pelsue et al. teaches a frame for a shelter structure comprising a plurality of flexible poles (18, 22) being intersected one another to define a plurality of four-sided openings, at least one tension harness (16) extending cross the opening and connecting a pair of diagonal vertices of the openings, and the tension harness having ends extending outward and being fastened to the ground in a common plane as same as ends of some of the poles for tie down the frame to the ground. It would have been obvious to one of ordinary skill in the art at time the invention was made to modify the frame of Bryant having tension harnesses connecting suitable diagonal vertices of the openings formed by the intersecting flexible poles as taught by Pelsue et al. for tensioning the poles and increasing a rigidity of the openings of the poles such that to provide stronger frame for supporting a shelter.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee '336, Niksic et al. '552, Nichols '718, Huddle '879, and Japanese Patent No. 2-66271 teach various frames for shelters similar to the claimed invention.

Inquiry Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 703-308-2491. The examiner can normally be reached on M-F (9:30-6:30), Second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



Winnie Yip
Examiner
Art Unit 3637

wsy
September 6, 2002

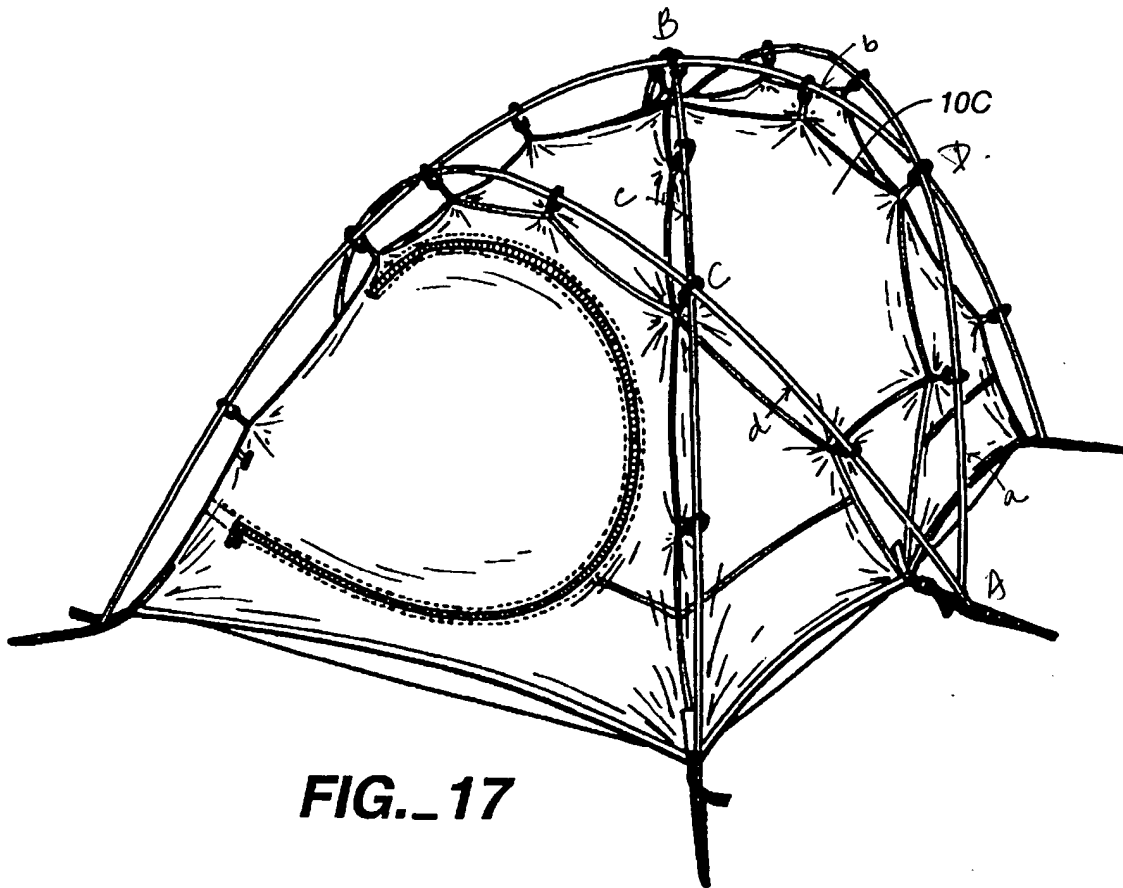


FIG. 17

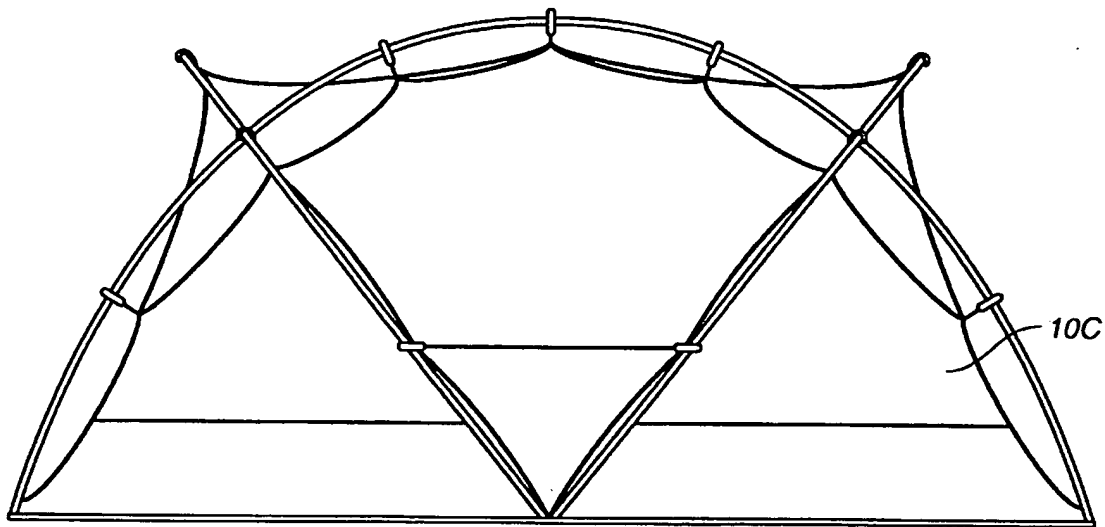
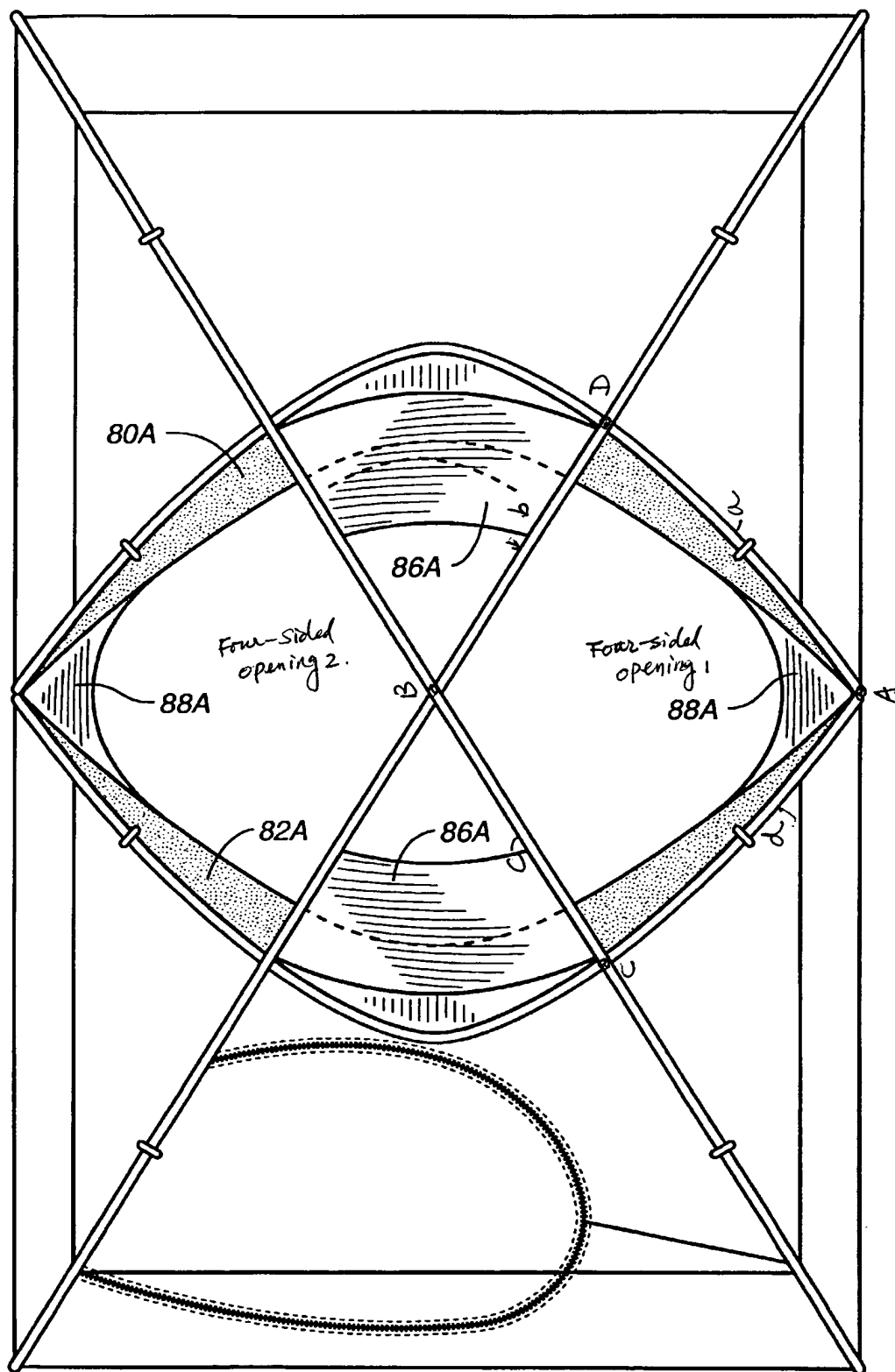
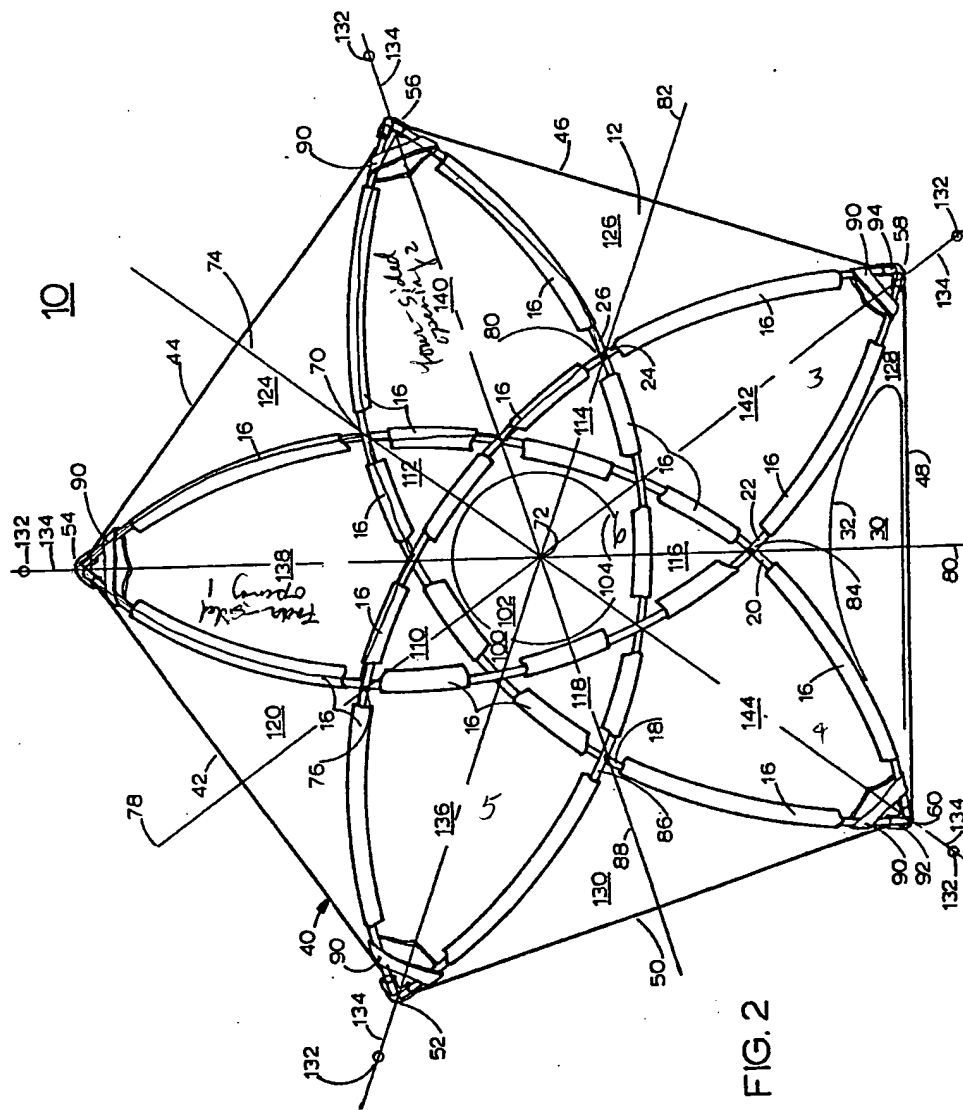


FIG. 18

**FIG. 19**



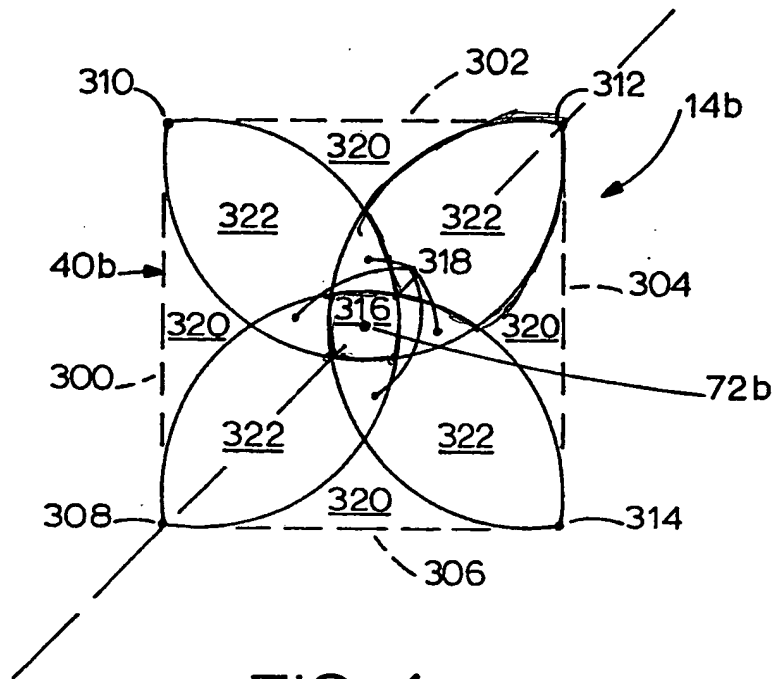


FIG. 4

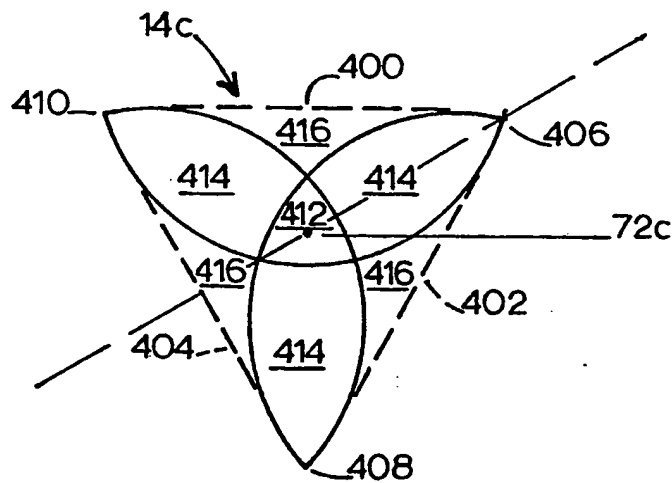


FIG. 5